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ABSTRACT

This study attempted to clarify the concept "program" by systematically examining the use of the term "program." The term was examined as it is used in ordinary language and in adult education literature. After analysis of the term within these two contexts, a typology was developed from the uses identified. The typology was then utilized as an aid in determining those variables affecting the validity of propositions containing the term "program" or concepts referred to in the use of the term. The results indicated that there were five senses of "program," that is, system, plan, document, performance, and planning. The implications that these results have for the adult educator are noted. They are: (1) the term "program" should be explicitly defined if it is to be used as a symbol to communicate a concept within a useful principle; (2) the use of the term "program" should not be abandoned; (3) Hosper's idea of defining and accompanying characteristics can be used as a basis for clarifying other adult education central terms and concepts; and (4) if there is a cause-effect relationship between various senses of "program" then further study is needed of the various things that can go wrong and which mitigate the cause-effect relationship.
(Author/JS)

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AN ANALYSIS OF THE DENOTATIONS OF "PROGRAM" AS EMPLOYED IN ORDINARY LANGUAGE AND ADULT EDUCATION DISCOURSE, WITH A TYPOLOGY OF PROGRAM BASED ON THE DENOTATIONS

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A paper presented by Courtney Schwertz,
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The purpose of this study was to clarify the concept program by systematically examining the use of the term "program"; first, in ordinary language, and second, in the literature of adult education. After the use of the term "program" was analyzed in these contexts, a typology was developed from the uses identified in the analysis. Following this, the study focused on the utilization of the typology as an aid in the determination of variables that affect the validity of propositions that contain the term "program" or concepts referred to in the use of the term.

Significance of the Problem

When a concept, such as program, serves as a variable in a proposition, it becomes a central concept within that proposition and the generality of the proposition itself is affected by the clarity (or lack of clarity) of the central concept.

In some instances researchers and authors stipulate a definition that only includes some of the ordinary denotative and connotative uses while excluding other interpretations. More often, though, research results in adult education are made available without a contextual reference for these central concepts. The net effect of the ambiguous communication of a central concept, such as program, is that principles derived from research are applied to inappropriate levels of

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practice. What follows is that the practitioner finds the principle useless or in opposition to the realization of the intended goal.

Thus the analysis of the use of the term "program" may have significance in two ways. First, analysis can lend clarification to the meaning of the word; that is, how the word is used as a symbol in communicating an idea or thing both in ordinary language and in adult education. Second, as the concept program is analyzed in its contextual use, attention is focused on how its use can affect associated variables. In this instance, clarification can assist in setting the parameters of the assumptions upon which a hypothesis is predicated and the generalization that is the result of the test of this hypothesis.

Framework of the Study

First, techniques of conceptual analysis were utilized to discover the various interpretations that may be given to the term "program." This analysis was pursued in ordinary language and also in the more specialized language of adult education.

Second, the investigation focused on the use of "program" as a referent within propositions that are related to educational research and/or practice. The data that were obtained in the analysis of uses of the term "program" were utilized to construct a typology, and test, in a general manner, generalizations drawn from some of the research and expert opinion base in the field of adult education.

Techniques of conceptual analysis

Conceptual analysis, also referred to as philosophical or

linguistic analysis, unlike experimental or quasi-experimental research, does not converge on tests of hypotheses. Rather, philosophical inquiry about the nature of a concept focuses on how the word or words are used to communicate the image that is engendered by the concept.

This study followed guidelines established by Austin (1961,1962); Black (1954); Hospers (1967); Scheffler (1960); Soltis (1968); and Wilson (1956, 1963).

Conceptual analysis, as a legitimate activity with a variety of techniques, is a relatively recent development (established about 30 years; Wilson, 1963, p. vii) within the discipline of Philosophy. Wilson (1963) in reviewing the nature of conceptual analysis suggests the usefulness of this field of study in the following excerpt.

> The importance of the aims of conceptual analysis is generally agreed. What is not fully grasped is that conceptual analysis is a specialized subject in its own right, with its own techniques: that general questions, and indeed all questions involving abstract concepts, cannot be tackled without these techniques in any but the most feeble and confused manner: and that the techniques can in fact be taught . . . (p. viii).

The techniques of conceptual analysis are utilized when the meaning of an utterance is ambiguous--either because it is too general and allows for a multitude of interpretations; or it is so specific that it rules out a range of normally accepted cases. Wilson (1963) calls these "Questions of Concept" (pp. 3-20). He explains this by writing,

> Questions of concept, then, are not questions of fact: nor are they questions of value: nor are they questions concerned with the meanings of words, or the definitions of words. . . . they are concerned with the uses of words, and with the criteria or principles by which those uses are determined (p. 11).

Philosophers who write about analyzing concepts suggest a variety of techniques that may be utilized when questions of concept arise. Generally, however, they tend to look at the meaning of a word (as a symbol of a concept) in one or both of the following approaches: (1) By the way the word is used and by its role in the language and life of people; and (2) the method and means by which statements containing the word are checked for truth and falsity.

Specific techniques of conceptual analysis vary from one author to another. The basic techniques and the similarities and differences in the approaches taken by Wilson (1956, 1963), Austin (1961, 1962), and Scheffler (1960) are reviewed in an abbreviated manner.

A technique for classifying words is advanced by Wilson (1965, pp. 18-30). His categories are: (1) Descriptive words; (2) Evaluative words; (3) Pointer words; and (4) Interjections.

Descriptive words describe experiences. Evaluative words give or deny value to the things or people they are applied to. Pointer words point out the sense of any sentence or phrase. Interjections are words merely used to express feelings and not to convey logical sense.

Scheffler (1960) and Soltis (1968) begin an analysis of a concept by looking at the type of definition given to the term used to convey the image of the concept. They have assigned the term "programmatic" to definitions of utterances that assign or withhold value. A stipulative definition is the assigning of conventions for the interpretation of a term, within a certain context, without regard to familiar usage. Descriptive definitions not only embody conventions governing discussions

but also explain the defined terms by giving an account of their prior usage. "They purport not to economize utterance, but to provide explanatory accounts of meaning (Scheffler, 1960, p. 16)."

Wilson (1956, pp. 31-32, 37) asserts that to classify words, or merely to categorize their definitions, in itself is inadequate to the clarification of a term. The significance of a sign (although this discussion is limited to words, they are only one of many signs) depends on the context in which it is used. Austin (1961) supports this viewpoint, " . . . what alone has meaning is a sentence (p. 24)." Scheffler (1960) also suggests this when he writes, " . . . definitions require to be supplemented, if only by some context, with some indication of the usage taken to be relevant . . . (p. 17)."

Wilson's technique for the analysis of statements relies heavily on verification. "Verification is a guide to meaning, because the meaning of a statement depends largely on its method of verification (Wilson, 1956, p. 52)." Wilson's (1956) criteria for verification are:

> (1) Discover the meaning of the statement, i.e. what its use is and what sort of thing it is intended to communicate. (2) Agree about how to discover whether it is true or not, i.e. about what is to count as acceptable evidence and what is not. (3) Consider the evidence and decide (p. 51).

Wilson's five categories of statements were utilized as one phase of the process of verification. These five categories are:

1. Metaphysical statements--statements which seem to have no meaning or method of verification at the present time;

2. Imperative and attitude statements--utterances that express feeling or desire and are the sort of statements not intended to be true or false;

3. Value statements--must contain evaluative or partly evaluative words, and the purpose of the utterance is to commend or evaluate;

4. Analytical statements--depend for their truth on a man-made set of rules, and follow logically from human definitions; and

5. Empirical statements--can be verified by tests conducted in terms of sense experience.

Another phase of analysis is the theory suggested by Austin (1962) which takes into account not only the truth value of statements but also the speech act that is manifested by the person making the utterance. He defines three types of speech acts--acts performed when one uses language: locutionary, illocutionary and perlocutionary acts. A locutionary act is the speaker's act of saying whatever he says; an illocutionary act is one the speaker performs in saying something (such as the act of ordering); a perlocutionary act is one the speaker performs by saying something (such as annoying someone). Austin's concern in philosophical analysis is not only the verification of an utterance, but also the conditions under which the speaker performs the act and then the consequences of that act.

Hospers (1967), in contrast, proposes a framework that employs two types of characteristics of concepts as aids in the determination of the proper use of terms that apply to concepts. The terms he stipulates for the characteristics are "defining" and "accompanying."

> A defining characteristic of a thing (not only a physical thing but a quality, an activity, a relation, etc.) is a characteristic in the absence of which the word would not be applicable to the thing (Hospers, 1967, pp. 23-24).

Furthermore, Hospers (1967) makes this distinction:

> The test of whether a certain characteristic is defining is always this: would the same word still apply if the thing lacked the characteristic? If the answer is no, the characteristic is defining; if the answer is yes, it is merely accompanying (p. 24).

Hospers (1967) also suggests that there are intrinsic as well as relational characteristics. Intrinsic characteristics are those characteristics that do not depend on the existence of other things. Relational characteristics, in contrast, depend on other things to make them defining.

Can one be sure the choice of the concept characteristics applying to a term is precise? Waisman (1953) writes, "Try as we may, no concept is limited in such a way that there is no room for any doubt (p. 120)."

Arguments for and against conceptual analysis

Not everyone in the academic community is in agreement on the use of techniques such as those employed in conceptual analysis. Marcuse (1964) describes these techniques as " . . . academic sado-masochism, self-humiliation, and self-denunciation of the intellectual whose labor does not issue in scientific, technical or like achievements (p. 173)." Further, Marcuse (1964) writes that this specific field of study has created "more illusory problems than it has destroyed (p. 186)."

Specifically those who argue against the use of ordinary language analysis claim that it impoverishes the richness and the fullness of concepts; that by doing this, concepts are not extrapolated but are delimitated and made narrower because of an orientation toward behaviorism and the dismissal of things that cannot be seen. Erickson (1970), for

example, believes that meaning transcends language. His concern with the analysis of concepts through language is that meaning is held "as a property of language, not as a property of things (p. 60)."

Arguing for strict operationalism, in contrast, are such authors as Bridgman (1927) and Benjamin (1955). Bridgman wrote, "If we have more than one set of operations, we have more than one concept, and strictly there should be a separate name to correspond to each different set of operations (p. 10)." Benjamin (1955), although conceding that operationalism may not be attainable in all instances, wrote, "The task of an operational theory is therefore one of listing and defining as clearly as possible the various operations which enter into the cognitive situation (p. 144)."

A perspective of the usefulness and limitations of employing techniques such as conceptual analysis is suggested by Back (1963).

> Any language must necessarily abstract from the totality of experience, and science must be especially selective. It is equally as one-sided to depict men as interacting only according to a restricted set of rules as to see their actions entirely in accord with transcendental conception (p. 70).

This investigation, then, does not provide an unchangeable description of the concept program. Rather, the concern is to clarify the concept program by looking at the use of the term "program" in ordinary language and in the more specialized language of adult education. Flew (1956) further clarifies this point,

> It is because use depends on correct usage while this in turn depends ultimately upon actual usage that changes in actual usage can enrich or impoverish the conceptual equipment provided by a language (p. 3).

What this investigator suggests is that with the use of conceptual analysis, ambiguity in the use of the term "program" may be reduced and thus the concept program may be communicated in a more lucid manner.

Application in educational research

Concepts alone have no explanatory or predictive power--only propositions can serve that function (Brodbeck, 1963, p. 68). Propositions that are commonly employed in educational research include assumptions, postulates, hypotheses, principles and theories and these indicate relationships between concepts.

Ambiguity of terms that denote concepts produce a blurred, undependable description resulting not only in unreliable communication but also nonmeasurable research. "Propositions that include ambiguous concepts are untestable by observation, hence indeterminate (Meehan, 1968, p. 36)."

The importance of one type of proposition and the relationships between concepts is shown by Gagne' (1965), "Principles are chains of concepts that make up what is generally called knowledge (p. 141)." Thus, for a concept to have utility within a proposition it must first be clarified as an entity. Wilson (1963) emphasizes that questions of concept must be resolved prior to their inclusion as useful elements in propositions.

> It is important not only to isolate the questions of concept from other considerations, but to deal with them first: because considerations of fact and morality cannot be relevantly applied at all until one has worked out just what they are supposed to be applied to (p. 25).

Procedures

Three stages of investigation were employed in this study. First, various senses of the term "program" in ordinary language were delineated from dictionary definitions and grammatical differences. Following this, statements and phrases containing "program" were subjected to analysis based on the techniques suggested by the philosophers who engage themselves in ordinary language analysis. Second, a search was made of the literature of adult education as a source of special meanings and as an origin of defining characteristics of "program" and accompanying characteristics of program. Third, the defining and accompanying characteristics were utilized to construct a typology. This typology was employed as a means for analyzing guidelines that relate to program and for postulating relationships between variables associated with program.

Results

Ordinary Language Usages

Four senses of the term "program" were extracted on the basis of dictionary definitions and the meaning derived from the origin of the term "program." Further, it was shown that the term "program" has two grammatical forms: (1) as a noun; and (2) as a transitive verb. "Is it possible to see a program?" is an example of the noun form use of "program." "Is it possible to see someone program?" is an example of the verb form use of "program." The four senses of "program" were assigned the terms "system," "plan," "document," and "performance."

"Program" in the sense stipulated by the term "system" is illustrated in the example, "The Boy Scout program is in every county." "Program" in the sense stipulated by "plan" is illustrated in the example, "The racing program today includes nine races." "Program" in the sense stipulated by "document" is illustrated by the example, "Let me see your racing program." "Program" in the sense stipulated by "performance" is illustrated in the example, "I really enjoyed the racing program today."

Techniques suggested by Austin (1962, 1961) were utilized to verify meanings associated with "program" in a variety of utterances. This analysis did not reject the notion that four senses of "program" exist, and in addition, the analysis revealed that the term may be used in utterances where it has no meaning at all, but is used merely as a word in an assertion that is intended to provoke action entirely unrelated to the meaning intended in the words of the assertion. Furthermore, this analysis revealed that under some conditions the act that is intended by the use of the term "program" in relationship to other terms, may not be verified because the act is somehow not carried out.

A range of meaning for each sense of the term was extracted from examples of utterances in ordinary language. "Program" in the sense of system might denote a range of from an idea or thing defined as a complex organization to an idea or thing defined as a social system to what was defined as a system. "Program" in the sense of plan is used to denote a mental formulation of a manner or method of procedure that is to be followed in a future course of action. The range in what would be denoted

by the use of the term "program" in this sense appeared to depend on the amount of detail in the plan. "Program" in the sense of document is used to denote graphic representations ranging from what was termed a "public announcement" to an extensively detailed manner or method of procedure. "Program" in the sense of performance refers to the engagement of one or more persons in an activity. The extent of involvement of participants, and the manner of assessing that involvement, are criteria that determine if the term "program" is applied to this sense.

Adult education usages

Examples of statements by authors in the literature of adult education were selected and analyzed for use of the term "program." Three of the four senses found in the ordinary language analysis were easily identifiable in the context of statements by authors. No unequivocal example of the use of "program" in the sense or document was found in this search. However, several examples were shown that inferred the use of the term in this sense and therefore the use of this sense of "program" was not rejected.

Several examples revealed that "program" is employed as a proper noun. The term "program," in those instances, is used with other terms to denote a particular thing only, e.g., Midwest Program on Airborne Television Instruction and Barrington Adult Education Program. In this phase of the analysis, it appeared that "program" when used in this sense as a common noun, is used to denote a unique system, i.e., one with educational activities.

Both the noun form and the verb form of the term "program" as used in the sense of plan were identified in the literature of adult education. A wide range of activity was denoted by the term "program" in the sense of performance by authors of articles in adult education.

The ordinary language analysis and the analysis of uses of "program" in adult education were utilized as the basis for selecting defining characteristics of "program" in various senses. On the basis of defining charactteristics, it was revealed that there are five concepts to which the term "program" may be applied. The additional concept was made apparent when defining characteristics were assigned to each of the four senses identified in the ordinary language analysis. At that point it became clear that the process of planning is a separate concept and cannot be attached as part of one of the other concepts because at least one criterion in the defining characteristics is different. Mental formulation is the product; mentally formulating is the process. They appear to be separate concepts.

Accompanying characteristics were extracted from statements by authors of articles in the literature of adult education. These were grouped and discussed in categories termed "content," "possession," "method," "time," and "space." The choice of relatively vague terms was deliberate in an effort to withhold the implication that they designated operational concepts. The accompanying characteristics were extracted from statements based on the assumption that they might apply to any of the concepts denoted by "program."

Also investigated was the language associated with computer technology and the specialized definitions that have been assigned to the term "program." While it appears that the term denotes a specific entity in that technology, several examples from the literature show attempts to clarify that concept by stipulative definitions and the use of modifiers with the term "program."

The term "programmatic" was also explored. An inference was made that the ambiguity in the use of "program" would follow to this derivative term.

A Construct of Program

The defining characteristics that were stipulated for the five senses of "program," and the accompanying characteristics extracted from the literature of adult education, were utilized to construct a typology. Each set of defining characteristics attributed to "program" has at least one variable within it. These variables were placed on ordinal scales. An underlying assumption is that they are measurable. No attempt was made to operationalize the accompanying characteristics as measurable variables.

Several selected guidelines relating to the program development process were utilized to test the application of the typology as a means of identifying independent, intervening, and dependent variables. In several cases, additional postulates were formulated to illustrate how the typology might be utilized. Although there is an underlying assumption that each concept has a measurable criterion within its defining characteristic, the measurement most often was referred to the criterion in the

defining characteristics of "program" in the sense of performance.

Based on the predominance of use of the criterion for "program" in the sense of performance, a conjecture may be raised that all of the senses of "program" are linking variables; that is, one sense is always dependent on another sense. Furthermore, it may be surmised that there is a systematic order which flows naturally from one sense to another, and based on this, those defining characteristics that fall between the independent and dependent variable (in the systematic order) are always intervening variables. However, it is likely that this phenomenon is due to the defining characteristics stipulated for each sense of "program." In addition, such a conjecture is not valid if the assumption of independence for each sense of "program" holds.

Conclusions

One can conjure the essence of five different ideas or things denoted by the term "program." The investigator concludes that there are five different concepts to which the term "program" may be applied. The notion of defining characteristics is useful in separating the images one has of the five concepts. Accompanying characteristics allow for the expansion of the concepts to include those ideas or things ordinarily and specifically denoted by the term "program," but within the limits dictated by the defining characteristics.

The defining characteristics, although selected on the basis of the analysis, are arbitrary. The conclusion is not made that the defining characteristics for each sense of program are irrevocable and final.

No specific conclusion beyond this investigation is made about the usefulness of the typology developed in this study. The investigator found it to be a useful construct for visualizing the early stages of a research design and for interpreting guidelines as they relate to the various concepts denoted by "program." A general conclusion is that this typology might become a useful tool in research design provided that the accompanying characteristics that serve as variables are operationalized.

Implications

Several implications for the adult educator result from this study. First, the term "program" must be explicitly defined if it is to be employed as a symbol to communicate a concept within a supposedly useful principle. "Program" is now used ambiguously in the literature of adult education and therefore is not a useful term, in many instances, in the principles now promulgated.

Second, the use of the term "program" should not be abandoned and replaced by terms such as those used in the study to identify the various senses in which the term is employed. This is implied since those terms, too, are used ambigously. Rather, there is an implication that the term "program" can be separated into senses by the utilization of the notion of defining and accompanying characteristics.

Third, Hosper's (1967) notion of defining and accompanying characteristics is a basis on which other central terms and concepts in the field of adult education could be clarified.

Fourth, the major implication revolves around the assumption that each of the five concepts denoted by "program" is independent of the others. Can someone take a make-belive microphone in hand and take part in a program without programming and without a program? Or can someone have a program before the program and disregard it during the program? (Austin's doctrine of infelicities, 1962). The implication, is, that if there is a cause-effect relationship between various senses of "program," e.g., planning to plan, plan to document, document to performance, than further study must be made of the various things that can go wrong and which mitigate the cause-effect relationship. It is these variables which mitigate the cause-effect relationships that the practitioner must also be able to control in order to effect the principles that ordinarily flow from research results.

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